TSENN-A

TESTER, BIT ERROR

- 1. **GENERAL.** This procurement requires a bit error rate test set capable of indicating data errors in bit streams.
- 2. CLASSIFICATION. Type II, Class 5, Style C, and Color R in accordance with MIL-T-28800 for shipboard applications.
- **3. OPERATIONAL REQUIREMENTS.** The equipment shall be capable of injecting and counting bit errors in a known data stream within the parameters and accuracies specified below.
- 3.1 Output message forms.
 - a. Random: Three pseudorandom test messages of 63, 511, and 2,047 bits.
 - b. Reversals: A 1:1 reversal signal.
 - c. Mark: A steady mark output.
 - d. Space: A steady space output.
- 3.2 Displays.
- **3.2.1 Error count display.** 2-1/2 digit numerical readout.
- **3.2.2 Excess indicator.** An excess indicator shall be provided for error counts that exceed the error count display capability.
- 3.2.3 Sync loss indicator. A synchronization loss indicator shall be provided.
- 3.3 Modem. The equipment shall be provided with switch-activated modem hand-shaking capabilities.
- 3.4 Speeds. The equipment shall be provided with the following crystal-controlled speeds:
 - a. 50, 75, 110, 135, 150, 300, 600, 1,200, 1,800, 2,000, and 2,400 baud.
 - b. 50 kilobits and less with a modem-supplied clock.
- **3.5 External timing.** Operation from an external timing input shall be provided.
- 4. GENERAL REQUIREMENTS.
- **4.1 Power source.** MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 6W.
- 4.2 Weight. 20 kg (44 lb) maximum.
- **4.3 Lithium batteries.** Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.